

# society for social responsibility in science

## SSRS Newsletter

No. 103

MARCH, 1961

### YOUNG SCIENTISTS AND THE DRAFT

Many young American scientists who felt their sense of social responsibility had a religious basis and that they should be conscientious objectors, have been deferred in recent years for graduate work until they were past the age of 26. Then just as their colleagues who were not conscientious objectors they have not been drafted although they are technically eligible to be drafted until the age of 35. As far as the editor of this issue knows the one group that has consistently been drafted in the 26 to 35 age bracket are the M.D.s. However there will always be a few who either because of their choice or the draft board's will be drafted before reaching the age of 26. In order to help other young scientists and engineers, in the U.S.A. who may face this prospect, and in order to acquaint our readers in all countries with the problems faced by a young scientist drafted as a conscientious objector, the editor asked Nevin Nolder to write:

#### A OPEN LETTER

This letter is being directed to individuals who, because of their religious convictions, do not feel free in conscience to participate in war and in the preparation for war. I am writing especially though, out of a concern for those who, like myself, have their background in the sciences, and face the problem of negotiating with their Selective Service Board on this issue.

Only recently, I found myself faced with this problem, and was hard put over several months, to locate and be assigned to a suitable position for my alternate service. Out of this experience, I feel that I have acquired some understanding of the continuous anxiety shared universally, I think, by religious objectors during this interim. Even more, the "draftee" with a science background, who wants to spend these two years in a constructive manner, using his training, rather than "marking time", tends to feel a sense of aloneness in his quest. It has only been during this past month that I have made the concrete acquaintance of one other individual trained in the sciences with a similar conviction. I hope, in this letter, to offer some useful information to anyone dealing with this problem, as well as some slight consolation. Others have met these same problems before . . .

First, let me state my criteria in evaluating any dealings with Selective Service or other individuals in connection with my own convictions regarding peace, in order to avoid misunderstanding. In order of priority: 1) Is this consistent with my convictions? 2) Will this make a maximal contribution to the welfare of hu-

manity? 3) Will this enable me to use and develop my own skills for further service?

I shall assume, for the sake of brevity, that we are already familiar with the four principal stands which may be taken when one is confronted with registering for induction into the armed forces in this country, viz. non-registrant, 1-O, 1-A-O, and 1-A. I chose, and have had my experience in connection with the 1-O position, and so, shall confine myself to discussing that particular stand.

In obtaining the 1-O classification, it is necessary that one prove to the satisfaction of one's local board (or appeal board) that by reason of one's religious training and belief, one cannot conscientiously participate in war in any form, nor in noncombatant training and service in the Armed forces. If your objection is not on a religious basis, but is nevertheless a central conviction, I see the non-registrant position as the only ethical stand. It may be helpful, in this event, to write your draft board and explain the situation (helpful not to you, but to them.) If the local board refuses your initial request for the 1-O classification, there remain three good chances for a reversal of that position. An appearance before the board in person, an appeal, to the appeal board, and an appeal to the president, in that order. President Eisenhower never, to the best of my knowledge, approved such an appeal, but President Kennedy has not yet had occasion to declare himself on this issue.

Having obtained the 1-O classification, the final big hurdle is locating and getting assigned to a suitable alternative service position. This may

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### Professional Meetings and Annual Meetings

Reflections by E. Ackerman

Most of the members of the Society for Social Responsibility in Science and indeed most of the readers of this Newsletter have gone to professional meetings at one time or another. Having just returned from a trip where he tried to go to two such meetings at once, the editor would like to share some of his feelings and thoughts.

In our justification for going to such meetings we often emphasize the increase in our knowledge from hearing detailed, complete papers in fields in which we are inadequately informed and from hearing shorter papers in areas in which we are actively working. During his recent trip, the editor attended papers at the meeting of the American Physical Society and at a meeting of the New York Academy of Science on Multiple Molecular Forms of Enzymes. His interest in the papers left little doubt that as a biophysicist he has continued through the years to become more and more bio- and less and less physicist.

It is interesting to contrast this informational aspect of professional meetings with the annual meeting of the Society for Social Responsibility in Science. In our meetings we are too rarely faced with concrete examples of a scientist or engineer who as in some fashion or other acted to bear witness to his beliefs of the social responsibility of scientists. Since the annual meeting is so unsuccessful in this regard, and since many of our members never can attend these meetings anyway, this editor has hoped to alter the Newsletter to include more such examples. The open letter from Nevin Nolder in this issue represents a first attempt in this direction. Truman Kirkpatrick, when he was the sole Newsletter editor, often asked people to send him newspaper clippings and stories about scientists and engineers who had accepted personal sacrifices to act in a socially responsible manner. Now the shoe is partly on the other foot, and I wonder if he asked the right question. Perhaps what we need most is more personal histories of our members and friends; how they chose their present jobs and why. And it might be wise, too, to include a few failures as well as success stories; that is scientists and engineers doing destructive work in spite of their efforts to find an alternative.

Besides technical information, there are many other attractions to professional meetings. The supervisor of the editor's Ph.D. thesis made quite a point of never listening to a paper at a professional meeting. Rather he stayed in the hall or in a conference room and talked to people. In this fashion, one can renew old acquaintances and sometimes find out more of a technical nature than from a dozen papers. It is also possible to transact all sorts of personal business such as talking about

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seem simple. It may even be simple for some. It wasn't for me! Nevertheless, proceed in hope—it all worked out well in the end.

Point one, begin to work toward locating at least three suitable positions as soon as you decide to take your stand. Do not wait for the board to ask you for your three choices. The earlier you begin your search, the better your chances are of having located and of being assigned to a really good position. Normally, three choices is all you'll need, but it never hurts to have a reserve—I used six.

If it is possible, it is to your advantage to choose your position from the currently "approved" list of employing agencies, which is available at your local board *supposedly*. It has been my experience though, that only larger boards in more metropolitan areas have really current comprehensive lists of this kind. It would probably be worth your while to make a trip if necessary to some sizable city if your own board doesn't maintain such a listing.

In any case, it is essential that your choices fall into one of the two categories of "appropriate civilian work" defined in section 166.1, regulation 1660 of the Universal Military Training and Service Act as amended. These are:

"(1) Employment by the United States Government, or by a State, Territory, or possession of the United States or by a political subdivision thereof, or by the District of Columbia."

"(2) Employment by a nonprofit organization, association, or corporation, which is primarily engaged either in a charitable activity conducted for the benefit of the general public or in carrying out a program for the improvement of the public health or welfare, including educational and scientific activities in support thereof, when such activity or program is not principally for the benefit of the members of such organization, association, or corporation, or for increasing the membership thereof."

It may be to your advantage to volunteer for service whether or not you have already been classified 1-O. This is done by filing the proper form (SSS Form 151). This may be worth checking into—be wary though—you have to sign away your right to appeal to do this.

It should be borne in mind also, that in certain states, there exist statewide directives making unapprovable certain types of work (e.g. teaching) owing to the bias of the state director. It should also be borne in mind that work for certain state governments entails things incompatible with the stand of a religious objector. Certain states for example, require an oath to bear arms in defense of the constitution of all state employees.

Finally, in selecting three "best choices" to include in your SSS Form 152, it seems to me to be a good policy to include as third preference, a position you are relatively certain the board will approve (i.e., one from their list) in order to be certain of being assigned to an agency of your

own choosing rather than to one of the board's. Of course, should the board fail to find a satisfactory selection among your first three, they may give you another chance to bring in three more. More probably, however, they will make three choices of their own, and ask that you select one from among those three. Should you refuse this alternative, a representative of the state director mediates arbitration between you and the board, and in the end, the board simply assigns you to a position of its own choosing if no satisfactory (to it) agreement is reached.

Regardless of the procedure, I think it obviously advantageous to be assigned to an agency of one's own choosing. There exist several "approved" agencies who more or less specialize in work with religious objectors. The most active among these agencies are, particularly, the Brethren Service Commission, and the Mennonite Central Committee.

One of the greatest advantages of working with a Service Agency such as the Brethren, lies in the fact that they dedicate themselves, at least in part, to the service of religious objectors rather than to exacting service from them. Thus, in emergencies, it may be possible to be assigned to one of these agencies while anticipating an early transfer to a position relating more closely to one's own field of training, without the risk of misunderstanding and litigation inherent in such dealings with less experienced organizations. It is my feeling, I should emphasize, that this sort of approach should not be abused by overuse, but should be confined to emergency situations, where virtually no desirable alternative exists.

In any proceeding, be constantly aware that your board is unique, bound only by the provisions of the Universal Military Training and Service act as amended, not by the National and State directors' directives, and may be as cooperative, inconsistent, or oppugnant as they wish within a very wide range.

A few final hints: always maintain a file of all your written and oral dealings with and concerning your Selective Service Board for reference in case of emergency. Study! Know yourself and your position as well as your board and the law. There is excellent literature available on this subject, such as G.H.C. Macgregor's "The New Testament Basis of Pacifism", and many denominations have at one time or another issued statements of immediate concern to the individual seeking out the relation of the church to war. And lastly, don't hesitate to ask for help. There are a number of well informed (as well as understaffed) agencies devoted solely to the assistance of religious objectors to warfare, to whom one may turn with almost any problem from, "Which form should I ask for?" to, "How do I get out of jail, now that I'm in?"

One especially excellent agency I would recommend, especially for problems in the earlier phases, is the National Service Board for Religious Objectors; 401 Third Street, N. W., Washington, D.C. This is a non-de-

This Newsletter is published monthly by the Society for Social Responsibility in Science, an organization of scientists and engineers whose purpose is to induce scientists to recognize a personal responsibility for the anticipated consequences to society of their work and to exercise their profession always for the benefit of humanity.

The Society for Social Responsibility in Science was founded in 1949. It has members in 19 countries and the Newsletter is circulated in 45 countries.

Statements made in the Newsletter do not necessarily represent official policies of the Society unless so stated. Signed articles are the responsibility of their authors; other material is the responsibility of the Editor. The SSRS Newsletter is not copyrighted; its material may be republished without obtaining permission, with the exception of directly quoted material which has previously been published elsewhere. For permission to reprint this, write the original publisher.

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Send all correspondence, including letters to the editor, to the Managing Editor, who is:

Franklin Miller, Jr.  
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nominal organization of wide experience, eager to be of help.

Be persistent, and good luck!

Sincerely,  
Nevin Nolder, Jr.  
Rochester, Minn.

This issue edited by E. Ackerman



## Professional Meetings

(Continued from page 1)

the SSRS Newsletter with the managing editor, or discussing the publishing of books. It is fascinating to find a friend from New Orleans who avoids the racial conflicts by the technique of staying away; and a cousin who is a theoretical physicist who doesn't even know the biophysicists at his own institution.

One problem the editor has never solved is what he should say to his many friends and former associates who work at military jobs. One former colleague who works at Fort Detrick was at least apologetic when he first started working there several years ago and still remembers that the editor does not share his point of view on the social responsibility of scientists. But so many others appear to be completely oblivious of such thoughts. We talk about the papers at the meeting, former friends who are there, where our children are in school and the universal problem of research support. Can or should the editor say to them: Behold I publish the truth; turn away from your present beliefs. Go and find a job which does not involve primarily destructive actions.—No, time is too short and our acquaintance too fleeting, our common bonds too far in the past.

This same purpose of bringing together persons with a common interest and who share a common background is also met by the Annual Meeting of the Society for Social Responsibility in Science. At such meetings there is little need to present our moral point of view because we all take for granted our common acceptance of the undesirability of work which we mutually consider destructive. Occasionally we may discuss where or how some one draws the line between what he feels he will and can do and what he feels he should not do. Time is too short, our acquaintance too fleeting to really get from our friends a clear idea of exactly what they do. Nonetheless, the Annual Meeting of the Society for Social Responsibility in Science does serve a very important purpose of reinforcing our convictions by personal acquaintance with others of similar persuasion.

## Who Joins SSRS?

Here is a random sample of fields of interest of recent SSRS members. The 17 persons who joined SSRS in the past 2 months indicated the following professional fields: Biochemistry; biophysics; psychology (2); engineering consultant; M.D.'s (4); professors (4) of biology, pathology, chemistry, mathematics; students (2) of chemistry, physics; a retired chemist; and one associate member, field not given. Almost every conceivable professional field is represented in the complete membership list.

All persons trained in pure or applied science are eligible for membership. To join, write "SSRS, Gambier, Ohio" requesting a descriptive leaflet and application form.

## Candidates Wanted for 1961 Elections

With the single exception of secretary, all elective offices of SSRS are open in 1961. Candidates are needed for president, vice-president, treasurer, chairman of membership, finance, occupation, and education divisions, seven delegates at large, and five members of the board of appeals. We aim to present two or more candidates for each position. All members are requested to send nominations to the chairman of the nominating committee:

Thomas F. Leo, M.D.  
92-03 153rd Avenue,  
Jamaica, New York

Please keep these points in mind:

1. You may propose yourself for nomination.
2. If you propose someone else, if possible contact him first and find out if he will allow his name to be entered. This may save some futile correspondence.
3. In recent years we have tried to elect officers, especially delegates at large and appeal board members, from different geographic locations rather than only from the Middle Atlantic region.

You can help to increase the vitality of SSRS by nominating good candidates promptly.

## Philosopher, Engineer Differ on Moral Duty of Scientist

Professor of Philosophy Ernest Nagel and Professor of Mechanical Engineering Victor Paschkis, both of Columbia University, debated recently before a student forum at that institution. Professor Nagel disagreed with Paschkis' contention that "a scientist is morally responsible for the consequence of his work". Nagel maintained that one must distinguish between a scientist *qua* scientist and a scientist *qua* private citizen. If a scientist objects to the ends of research he should "protest as a citizen, not as a moralistic scientist," he said. Professor Nagel also differed with Paschkis' statement that "a scientist who does not look at the social implications of his work is expressing an attitude unbecoming a professional person." The philosophy professor argued that a scientist cannot always foretell the consequences of his research. "A refusal to take part in research because of its supposed ends leads to a hamstringing of society, to social anarchy," he said.

Professor Paschkis, however, insisted a scientist "cannot lend his skills to something he thinks is wrong." As an example of a moral scientist, he cited German physicists and physicians who worked for the Nazis. Nagel replied that "scientists do not have enough political sophistication to make diplomatic decisions."

It is interesting to note the following

comment of the student member of the committee who invited Paschkis to speak: "I am quite confused; I had expected that the positions taken would be reversed: that the philosopher would request personal responsibility and the scientist refuse it."

The debate grew out of some letters to the editor of the *Columbia Daily Spectator* in which students voiced their bewilderment regarding the problem of personal responsibility.

## Magazines in Review

The publishers of *Current*, (905 Madison Avenue, N. Y. 21, N. Y.,) sent a complimentary copy of their magazine for January 1961. This small 64 page issue is completely made up of quotations, usually about one paragraph long from each source. Such quotations from many sources are grouped by topics. Several in the January issue should be of interest to readers of the SSRS Newsletter. Particularly significant for us are the group of quotations on pages 6-15 on "The Control of War". Our readers would probably also be interested as scientists and engineers in their quotations on "The Ocean as a Resource", "The Water Shortage", "The Future of Agriculture", and the "Impact of Automation". The quotations on the "Human Uses of Science" which conclude the issue are all taken from an article by Paul Goodman which appeared in the December issue of *Commentary*, (American Jewish Committee, 165 East 56th Street, N. Y. 22). Goodman concludes with a plea for many of the things we believe such as "dissociation of scientists from the military" and "development of regions of poverty in light of what is humanly advantageous" rather than trying to have them follow the patterns of the United States and Western Europe.

— E. A.

*New University Thought*, Vol. 1, No. 3, due on the newstands at the end of February, contains a major concentration on peace and related issues. The first of the three articles dealing with peace is a report by a special research committee on the extent and direction of organized peace activities in the U. S. and presents important and interesting facts on peace groups and their most recent efforts. This is the most recent attempt by a U. S. publication to survey the peace movement in the country, and it contains a chart listing peace groups on college campuses, and summarizing recent actions for peace.

The second article is a description of the recent Civil Defense protest demonstrations in New York City, and it was written by participants. The other piece is an analysis of the defeat of William Meyer, the "peace Congressman" from Vermont. Written by one of Meyer's campaign workers, the article examines Meyer's election in '58 and his defeat in '60, and it attempts to determine what effect, if any, his "unpopular" and extremely controversial views had on the outcomes of the two campaigns.—E. J. L.



# Electronics and Medicine

(Continued)

The editorial in the December issue of the Newsletter on Electronics and Medicine evoked two letters to the editor neither of which was meant for publication. Both letters emphasized the point of view that electronics today is largely supported by military contracts for basically destructive devices. And both also pointed out that it is very hard to find any other type of work for a trained electronics engineer or for a physicist specializing in electronic devices.

In the editorial it was suggested that one role of the SSRS could be to help to find and to point out areas that might be suitable for retraining and relocation of these experienced scientists and engineers, should our armaments developments ever decrease. Unless we can do this the persons so employed will represent a large block dedicated to prolonging the cold war. From the unpublished letters it appears that there are two different sorts of questions: 1) What types of jobs can an electronic engineer obtain now if he wants to change to more constructive work, but avoid the probability of the company he works for folding rapidly? And 2), what can we envisage for a long term solution?

It would be wonderful if one could answer either of these in a simple direct form. Alas this editor can not, and he has not found anyone else who can. However, we are all free to speculate. The editor's speculations follow; perhaps some of the Newsletter readers will enjoy reading them. It is hoped that others will be so irritated that they will write much better answers for publication in the Newsletter.

At the present time, electronics engineers can find employment, utilizing their skills in non-military industries associated with producing household items such as television sets, intercoms, washing machines, and telephones. The number of semi-skilled employees in these industries of necessity is large compared to the trained electronics engineers. There are also jobs available applying automation by electronic control to such problems as the manufacture of automobiles and toilet paper, to executive decision making, and to the control of chemical processes. All of these lie outside the area of medical electronics, yet all involve the application of advanced electronic techniques to constructive ends not directly associated with military production of military development. It is the editor's impression that openings exist in all of these areas for the skilled electronics engineer and applied physicist. The salaries are lower than those of the man helping to produce an ICBM or a new germ weapon. But this is as it should be, for we cannot expect to have our principles without paying for them.

From the long term point of view, the problem appears much more difficult to the editor. The large numbers of skilled physicists, physical chemists,

and electronics technologists actively employed in military research and development would be jobless if a major relaxation occurred in the cold war. Where would these people go? What would they do? Although they are not paid on a scale comparable to a surgeon or even a medical clinician, the scientists and engineers engaged either in military projects or else in projects dependent on military contracts are usually better paid than their counterparts in other organizations. And there just do not exist job openings to absorb them at the present time. Perhaps we would become similar to the farmers where the marginal producers are continually fighting bankruptcy in spite of government aid. Perhaps greatly increased expenditures by the National Institutes of Health for research and development and greatly increased appropriations for civilian organizations of the National Aero Space Agency could help take up the load. If we believe this, (and the editor does), we must accept the fact that taxes cannot be reduced by a curtailment of military spending nor can the funds made available all be used for building schools and hospitals. A thaw in the cold war could only lead to a redistribution of the federal budget. This is surely a dismal conclusion, but the editor can see no alternative.

— Eugene Ackerman

## Kennedy Asked to Convert Fort Detrick to World Health Center

— Petition Enclosed —

The Council of SSRS commends to your attention the enclosed petition to President Kennedy with its 4-point program asking the U. S. to stop development of biological weapons and calling for constructive use of the facilities of Ft. Detrick as a World Health Center. According to a leading scientist at Ft. Detrick, bacterial, viral and fungal weapons are primarily designed for strategic use against civilians, even unarmed women and children, and have little tactical military worth against armed aggressors. The petition seeks to establish a "beachhead of cooperation" and "push back the jungles of suspicion"—goals stated by the President in his inaugural address. As columnist Drew Pearson writes, Ft. Detrick "has hurt us far more than any good we can ever gain". Many believe that the U. S. can and should take the lead in renunciation of preparation for germ warfare, and that the risk associated with unilateral action in this area would be small compared with the possible gain.

**Biological scientists:** Please note a special section of the petition in which you may affirm your non-participation in development of biological weapons.

The SSRS is an international organization. We ask the indulgence of our members and readers outside the U. S. for whom the above is not appropriate. Petitions are enclosed only with copies of the Newsletter sent to readers in the United States.

## Occupation Division

The positions listed in the last few Newsletters have been filled. We print ads for any scientist or engineer who has job problems related to conscience or to the use of his professional skill for constructive purposes.

All correspondence should be directed to the Occupation Division Chairman, who is M. Jane Oesterling, Women's Medical College, Philadelphia 29, Penna.

## SSRS Library

These are some of the publications now available on loan from the SSRS library. To borrow them, write to Jean Stangle, 34 Third St., Batavia, Ohio.

*The Arms Race: a Programme for World Disarmament*, by Philip Noel-Baker. 603 pp. \$2.00 paperbound. Sketches nuclear history and disarmament proposals, describes other mass destruction weapons. Concludes that disarmament is practical if well planned. Comprehensive; highly recommended.

*Defense in the Nuclear Age*, by Stephen King-Hall. Nyack, New York, Fellowship Publications, 1959. 234 pp. \$2.75. A British militarist recommends ceasing nuclear war but disclaims pacifism—original and controversial. Includes a chapter for Americans.

*Dollars and Sense of Disarmament*, by Carl Marzani and Victor Perlo. New York, Marzani and Munsell, Publishers, 1960. 240 pp. \$1.95. A must for anyone who wants to be able to argue the economics of disarmament—optimistically. Reviewed in July-August 1960 Newsletter.

*Fallout, a Study of Superbombs, Strontium 90, and Survival*, edited by John M. Fowler. New York, Basic Books, 1960. 235 pp. Objectively as possible describes nuclear bombs, fallout, and observable and potential effects of radiation. Eleven writers contributed. Reviewed in May 1960 Newsletter.

*Fallout: Today's Seven-Year Plague*, by Linus C. Pauling. New York, Mainstream Publishers, 1960. 23 pp. 20¢. Pleads for disarmament on a moral basis; reprint of Dr. Pauling's 1959 speech at Carnegie Hall sponsored by the National Committee for Sane Nuclear Policy.

*Sanity and Survival: the Non-Violent Alternative*, by Jerome D. Frank, M.D. 16 pp. 20¢. Could non-violence work with Americans? What would be the effect on Russia and other countries? One of the "Fresh Thoughts on War" series published by Acts for Peace.

Do you have a book or pamphlet related to SSRS interests you'd like to share with others? Donate it to SSRS Library. Write Jean Stangle.